

SEMICONDUCTOR MEMORY DEVICEABSTRACT OF THE DISCLOSURE

5 A semiconductor memory device for error correction
encoding and decoding able to avoid erroneous judgment
occurring due to erroneous correction when a nonvolatile
memory is in a predetermined initial state, wherein, at
the time of writing, write data and predetermined status
10 data, for example, erasure data when the nonvolatile
memory is in an erasure state are compared and, when the
result of the comparison is that the write data coincides
with the erasure data, the erasure data is selected and,
conversely when they do not coincide, the encoded data
15 obtained by error correction encoding the write data is
selected and written into the nonvolatile memory, while
at the time of reading, when the result of the comparison
between the read data and the erasure data from the
nonvolatile memory is that the read data coincides with
20 the erasure data, the erasure data is selected and,
conversely when they do not coincide, the decoded data
obtained by error correction decoding the read data is
selected and output.